

REMARKS

In the Office Action, claims 1 and 26-72 are pending and claims 36-42, 54-60, and 64-72 are withdrawn.

As a first matter, Applicants note that certified copies of the foreign priority documents were submitted to the Patent Office on February 17, 2004.

In the Office Action, the Abstract was objected to due to its length. The Abstract is herein amended as to not exceed 150 words in length. The disclosure of the application was also objected to, specifically with regard to the cross-noting section. The disclosure has herein been amended to state the status of parent application PCT/SE00/00822.

Also in the Office Action, claims 1, 26-31 and 35 are rejected under 35 U.S.C. 102(b) as being anticipated by Johansson et al (U.S. Patent No. 5,447,604). This rejection is respectfully traversed.

Johansson '604 relates to silica sols and a process for their production. The process comprises (a) acidification of an aqueous alkali water glass solution to a pH of from about 1 to about 4; and (b) alkalization of the acid sol such that the obtained sol normally will get a pH value above 10.5 (see col. 2, line 29 to col. 3, line 12; col. 5, lines 15 to 51). The Johansson '604 patent does not disclose first and second alkalization steps with a step of particle growth in between. Accordingly, the Johansson '604 patent does not anticipate the present claims.

Claims 1, 26-30, 32 and 43-48 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as being obvious over Watanabe et al (U.S. Patent No. 5,100,581). This rejection is respectfully traversed.

Watanabe relates to a high-purity stable silica sol and a method for its preparation. More specifically, the method includes acidification of an aqueous solution of a water-soluble alkali metal silicate to form an aqueous solution of active silicic acid which has a pH value of from 2 to 4 (referred to as step (a) in Watanabe); the addition of an aqueous solution of sodium or potassium hydroxide to the aqueous solution of the active silicic acid to provide a pH value of from 7 to 9 (referred to as step (d) in Watanabe); and adding ammonia to the aqueous sol (referred to as step (g) of Watanabe). Watanabe does not teach, suggest, or disclose alkalizing the sol in a second alkalization step to a pH of at least 10.0 by the addition of alkali selected from the group consisting of lithium hydroxide, sodium hydroxide and potassium hydroxide; an aqueous silicate solution, or a mixture thereof. Further, it would not have been obvious to one of ordinary skill in the art to add such second alkalization step to the process of Watanabe. Accordingly, the present claims are both novel and non-obvious over Watanabe.

Claims 1, 29-30, 32-35, 43, 47-48 and 50-53 are rejected under 35 U.S.C. 102(b) as being anticipated by Johansson et al (U.S. Patent No. 5,643,414). This rejection is respectfully traversed.

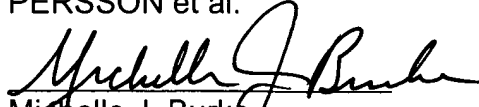
The Johansson '414 patent relates to a silica sol and a process for its production. The process comprises (i) acidification of aqueous alkali water glass solution to form an acid sol having a pH of from about 1 to about 4; (ii) alkalization of the obtained acid sol to a pH of at least 8; (iii) allowing particle growth of the alkalized sol to achieve a specific surface area within the range of from 750 to 1000 m<sup>2</sup>/g; and (iv) aluminium modification (see col. 2, line 40 to col. 4, line 9). Johansson '414 discloses that the aluminium modification is carried out by means of an aluminate, sodium or potassium aluminate (see col. 3, lines 58-61). There is no disclosure of alkalisng the sol in a second alkalisation step by the addition of alkali, aqueous silicate solution, or a mixture thereof. Accordingly, the Johansson '414 patent does not anticipate the present claims.

Claims 1-26-35, 43-53 and 61-63 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johansson '414, optionally in view of Brekau et al (U.S. Patent No. 5,458,812), Vossos (U.S. Patent No. 3,714,064), Chilton (U.S. Patent No. 3,560,400, and Mindick (U.S. Patent No. 3,502,593). This rejection is also respectfully traversed.

The aluminium modification taught in Johansson '414 and discussed above is a modification of the surface of the particles for the stabilization of the surface. This modification is carried out by means of an aluminate, sodium or potassium aluminate (see col. 3, lines 58-65). There is no disclosure, suggestion or teaching in the Johansson '414 patent of the addition of an alkali, an aqueous silicate solution, or a mixture thereof to a sol that was subjected to particle growth. Further, as the object of the aluminate addition according to Johansson '414 is to achieve surface modification with aluminium, there is no motivation for one of ordinary skill in the art to replace the aluminate with alkali, aqueous silicate solution, or a mixture thereof. Still further, there is also no disclosure, teaching or suggestion in the cited prior art of Brekau, Vossos, Chilton and Mindnick that would motivate one of ordinary skill in the art to do so.

Thus, for the reasons set forth above, the present invention is both novel and non-obvious over the cited prior art and the Applicants respectfully request reconsideration of the rejection of claims 1, 26-35, 43-53, and 61-63 and ask that the claims be found in condition for immediate allowance.

Respectfully submitted,  
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